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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/616,036	07/08/2003	Akhlaq Moman	180577-00630WS	9805
31013	7590 01/18/2005		EXAMINER	
	LEVIN NAFTALIS &	PASTERCZYK, JAMES W		
INTELLECTUAL PROPERTY DEPARTMENT 919 THIRD AVENUE			ART UNIT	PAPER NUMBER
NEW YORK		1755		

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/616,036	MOMAN ET AL.			
		Examiner	Art Unit			
· · · · · · · · · · · · · · · · · · ·	The MAILING DATE of this communication a	J. Pasterczyk	1755			
Period f	or Reply	ippears on the cover sheet w	ntn tne correspondence address			
THE - Extended aftend - If thended - If No - Fail Any	HORTENED STATUTORY PERIOD FOR REF MAILING DATE OF THIS COMMUNICATION ensions of time may be available under the provisions of 37 CFR in SIX (6) MONTHS from the mailing date of this communication. in the period for reply specified above is less than thirty (30) days, a real period for reply is specified above, the maximum statutory period to reply within the set or extended period for reply will, by state that the period for reply will, by state that the period for the period for reply will, by state that the management of the period for the period for the period for reply will, by state that the period for reply will, by state that the period for the period	N. 1.136(a). In no event, however, may a eply within the statutory minimum of thiod will apply and will expire SIX (6) MOI tute, cause the application to become A	reply be timely filed rty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).			
Status						
1)	Responsive to communication(s) filed on					
2a)□	☐ This action is FINAL . 2b) ☐ This action is non-final.					
3)□	Since this application is in condition for allow	e this application is in condition for allowance except for formal matters, prosecution as to the merits is				
	closed in accordance with the practice unde	r <i>Ex parte Quayle</i> , 1935 C.[D. 11, 453 O.G. 213.			
Disposit	tion of Claims					
4)⊠	Claim(s) <u>1,3-5,7,8,10-19,21-28 and 30</u> is/are	e pending in the application.				
	4a) Of the above claim(s) 27,28 and 30 is/ar	e withdrawn from considera	tion.			
5)□	Claim(s) is/are allowed.					
6)⊠	Claim(s) <u>1,3-5,7,8,10-19 and 21-2</u> sis/are re	jected.				
7)	Claim(s) is/are objected to.					
8)⊠	Claim(s) <u>1,3-5,7,8,10-19,21-28 and 30</u> are s	subject to restriction and/or e	election requirement.			
E Applicat	ion Papers					
9)[The specification is objected to by the Exami	ner.				
	The drawing(s) filed on is/are: a) a		by the Examiner.			
	Applicant may not request that any objection to the	· · · · · · · · · · · · · · · · · · ·	•			
	Replacement drawing sheet(s) including the corre	ection is required if the drawing	g(s) is objected to. See 37 CFR 1.121(d).			
11)	The oath or declaration is objected to by the	Examiner. Note the attache	d Office Action or form PTO-152.			
Priority	under 35 U.S.C. § 119					
12)🛛	Acknowledgment is made of a claim for forei ☐ All b)☐ Some * c)☒ None of:	gn priority under 35 U.S.C.	§ 119(a)-(d) or (f).			
	1.⊠ Certified copies of the priority docume	ents have been received.				
	2. Certified copies of the priority docume	ents have been received in A	Application No			
	3. Copies of the certified copies of the pr	-	n received in this National Stage			
٠	application from the International Bure					
* ;	See the attached detailed Office action for a li	st of the certified copies not	t received.			
Attachmer	nt(s)					
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)		Summary (PTO-413) (s)/Mail Date			

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

Paper No(s)/Mail Date 7/8/03.

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____.

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- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
- I. Claims 1, 3-5, 7, 8, 10-19 and 21-26, drawn to a catalyst composition, classified in class 502, subclass 115 inter alia.
- II. Claims 27, 28 and 30, drawn to an olefin polymerization process, classified in class 526, subclass 160 inter alia depending on the particulars of the catalyst used.
- 2. The inventions are distinct, each from the other because:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the process for using the product as claimed can be practiced with another materially different product, such as a chromium oxide catalyst.

- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
- 4. During a telephone conversation with William J. Spatz, Esq., on 1/7/05, a provisional election was made with traverse to prosecute the invention of group I, claims 1, 3-5, 7, 8, 10-19 and 21-26. Affirmation of this election must be made by applicant in replying to this Office action. Claims 27, 28 and 30 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
- 5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the

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currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

- 6. The abstract of the disclosure is objected to because it does not appear to describe the actual invention of the present application; c.f. below. Correction is required. See MPEP § 608.01(b).
- 7. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: It was not executed in accordance with either 37 CFR 1.66 or 1.68.

Specifically, inventor Moman appears to have signed both for himself and inventor al-Bahily. No reason and supporting affidavit for this is given.

8. Claims 1, 3-5, 7, 8, 10-19 and 21-26 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims 1, 3-5, 7, 8, 10-19 and 21-26 fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in the specification as originally filed. In that paper, each and every working example is drawn to a supported catalyst having all three transition metal components of present claim 1, both cocatalyst components of claim 1, as well as a polyvinylchloride support and a Grignard reagent but no alcohol, and these examples indicate that the invention is different from what is defined in the claim(s) because the claims as currently drawn only require one of the transition metal compounds, one of the cocatalyst components, and the presence or absence of the support, magnesium and alcohol compounds is

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not clearly stated in the claims. As applicants know, the chemical arts and the catalyst arts in particular are considered to be highly unpredictable, hence a clearly drawn disclosure and claims are more necessary in such a case than in many other fields of technology.

9. Claims 1, 3-5, 7, 8, 10-19, and 21-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, 1. 3, "Ziegler-Natta" is normally used to refer to a complete catalyst or the polymerization process performed using such a catalyst, hence it is not clear what is meant by a "Ziegler-Natta compound", particularly where titanates are also used to make Ziegler-Natta catalysts. Also, the wording of the claim currently requires there be only one of a "Ziegler-Natta compound", a metallocene, or a titanate, or even at least one alcohol (which would not likely result in a working catalyst), and one of an alkyl aluminum or an alumoxane, with the presence or absence of the magnesium compound and the polymeric support not being clearly recited. In other words, it is not clear exactly what combinations of individual reagents are being claimed here, although the specification examples seem to require all except the alcohol. In the third from last line insert a comma before "or at least one alcohol compound".

Claims 3 and 4 also use the term "Ziegler-Natta compound".

Claims 3 and 5 use the symbol Tm to refer to a transition metal, yet this symbol already has a known conventional use in chemistry as the symbol for thullium. It is required that another symbol be used since thullium is known to form compositions that perform olefin polymerization catalysis. A simple "M" will do.

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In claim 26 the embodiment where the catalyst precursor comprises an alcohol lacks antecedent basis since there is no transition metal in that permutation; note last two lines of this claim which require a transition metal.

- 10. Claims 3, 15 and 18 are objected to because of the following informalities: in claim 3 the coefficients need to be subscripted, in claim 15 l. 3 and 4 insert a hyphen between "n" and "butyl" and correct the spelling to "ethyl", and in claim 18, last line, "or" should be --and--. Appropriate correction is required.
- 11: The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 12. Claims 1, 3, 4, 12 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Winslow et al., USP 5,534,472 (hereafter referred to as Winslow).

Winslow discloses the invention as claimed (abstract; col. 6, l. 22-36, l. 45-68; col. 7, l. 1-23; examples) when silica is recognized to be an inorganic polymer of the empirical formula SiO₂.

13. Claims 1, 5, 7, 8, 16, 22, 24 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Sagar et al., USP 5,595,950 (hereafter referred to as Sagar).

Sagar discloses the invention as claimed (abstract; col. 3, 1. 2-60; col. 5, 1. 6-25, 1. 50-63; col. 6, 1. 40-53; examples including comparative examples).

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14. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to J. Pasterczyk whose telephone number is 571-272-1375. The

examiner can normally be reached on M-F from 9 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mark Bell, can be reached at 571-272-1362. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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PRIMARY EXAMINER

J. Pasterczyk

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1/11/05